

LAURA G. DE MARCO

Department of Mathematics
Harvard University
1 Oxford Street
Cambridge, MA 02138
demarco@math.harvard.edu

EDUCATION

Harvard University, Cambridge, MA
Ph.D. in Mathematics, June 2002
Thesis advisor: Curtis T. McMullen
University of California, Berkeley, CA
M.A. in Mathematics, 1998
University of Virginia, Charlottesville, VA
B.A. in Mathematics and Physics, 1996

EMPLOYMENT

Professor of Mathematics, Harvard University, July 2020 – present
Radcliffe Alumnae Professor at the Radcliffe Institute for Advanced Study, July 2020–present
Henry S. Noyes Professor of Mathematics, Northwestern Univ., September 2019 – June 2020
Professor, Northwestern University, September 2014 – August 2019
Professor, University of Illinois at Chicago, August 2012 – August 2014
Associate Professor, University of Illinois at Chicago, August 2009 – August 2012
Assistant Professor, University of Illinois at Chicago, August 2007 – August 2009
Assistant Professor, University of Chicago, September 2005 – August 2007
L. E. Dickson Instructor, University of Chicago, September 2002 – August 2005

PRIMARY RESEARCH INTERESTS

Dynamical systems, Arithmetic geometry, Complex analysis. I am mainly focused on the dynamics of rational maps $f : \mathbb{P}^1(\mathbb{C}) \rightarrow \mathbb{P}^1(\mathbb{C})$ and their moduli spaces, studied with a combination of complex-analytic and algebraic techniques.

GRANTS and AWARDS

National Academy of Sciences, elected Member, 2020 – present
PI, NSF Research Grant, 2019–2022
Invited Speaker, International Congress of Mathematicians, 2018
Satter Prize, American Mathematical Society, 2017
PI, NSF Research Grant, 2016–2019
Simons Foundation Fellowship, 2015–2016; Visiting Professor, University of Michigan (Fall 2015), Visiting Professor, Stony Brook University (Spring 2016)
PI, NSF Research Grant, 2013–2016
Kreeger Wolf Distinguished Visiting Professor, Northwestern University, 2013–2014
Fellow of the American Mathematical Society, 2012
NSF Career Award, 2008–2013
Sloan Foundation Research Fellowship, 2008–2010
PI, NSF Research Grant, 2006–2009

NSF Postdoctoral Fellowship, University of Chicago, 2003–2006

Grants awarded for conferences and research programs

Simons Symposium Series in Mathematics, Simons Foundation, 2019–2023

Clay Mathematics Institute, for *Circle at Infinity*, honoring McMullen, 2020

Co-PI, NSF conference grant for *Circle at Infinity*, honoring McMullen, 2020

Workshop, Mathematisches Forschungsinstitut Oberwolfach, 2020

AIM Workshop, American Institute of Mathematics, 2020

PI, Midwest Dynamical Systems Conference Grant, NSF, 2019–2022

BIRS Oaxaca workshop, Banff International Research Station, 2017

AIM SQuaRE program, American Institute of Mathematics, 2016–2019

PI, Midwest Dynamical Systems Conference Grant, NSF, 2016–2019

Co-PI, GROW 2017: Strengthening the Mathematical Workforce, a conference for undergraduate women in mathematics, NSF, 2017

Co-PI, GROW: Strengthening the Mathematical Workforce, a conference for undergraduate women in mathematics, NSF, 2016

Co-PI, NSF Research & Training Grant at Northwestern, 2015–2020

Co-PI, NSF Research & Training Grant at UIC, 2013–2014

INVITED LECTURES

UPCOMING

Distinguished Lecture Series, Brown University, 2021–2022

Plenary Lecture, Conference of the Italian Mathematical Union, Padova, Italy, May 2022

Circle at Infinity, a conference to celebrate the mathematics of C. T. McMullen, Harvard University, June 2022

Complex Dynamics in the Tropics, to celebrate the mathematics of C. Petersen, IMPA, Brazil, November 2022

Conference on Dynamical Systems, ICTP Trieste, Italy [postponed]

Shishikura birthday conference, Kyoto, Japan [postponed]

RECENT (since 2018 only)

Recent Developments in Algebraic Geometry, Arithmetic, and Dynamics (Online), National University of Singapore, 2021

Unlikely Intersections and Diophantine Geometry, (Online) Workshop, University of Reading, UK, 2021

AMS Special Session in Arithmetic Dynamics, (Online) Joint Math Meeting 2021

Algebraic dynamics and connections to difference and differential equations, (Online) Conference, Banff Research Station, Canada, 2020

Ziwet Lecture Series, University of Michigan, 2020

Colloquium, Purdue University, 2019

Earle Raymond Hedrick Lecture Series, MAA MathFest, 2019

Myhill Lecture Series, University of Buffalo, 2019

Grosswald Lecture Series, Temple University, 2019

Analytic Low-Dimensional Dynamics, honoring Lyubich, Fields Institute, Toronto, 2019

Hayden-Howard Lecture, University of Kentucky, 2019

Colloquium, Harvard University, 2019

Colloquium, University of Chicago, 2019

Yormark Distinguished Lecture, Stanford University, 2019

Sue Geller Undergraduate Lecture, Texas A&M University, 2019

Dynamical Systems Session, International Congress of Mathematicians, Brazil, 2018

Conference on Diophantine Approximation, CIRM, Marseille, France, 2018
Plenary Lecture, Canadian Mathematical Society, Vancouver, 2018
Number Theory Seminar, University of Maryland, 2018
Dynamics Seminar, University of Maryland, 2018
Dynamics, Topology, and Numbers Conference, Max Planck Inst, Bonn, Germany, 2018
Number Theory Days, Conference, University of Basel, Switzerland, 2018
Plenary Lecture, British Mathematics Colloquium, Scotland, 2018
Probability, Analysis, and Dynamics Conference, Bristol, England, 2018
Colloquium, Queen's University, Canada, 2018
Dynamical Systems Seminar, University of Toronto, Canada, 2018
Harry E. Valentine Lecture, Kansas State University, 2018
Dynamical Systems Seminar, University of Chicago, 2018

GRADUATE STUDENTS

Holly Krieger, PhD 2013
Paul Reschke, PhD 2013
Hexi Ye, PhD 2013
Cara Mullen, PhD 2017
Nicole Looper, PhD 2018
Khashayar Filom, PhD 2020
Shuyi Weng, PhD 2020
Signe Jensen, PhD 2020
Current PhD students: Yan Sheng Ang (MIT), Jit Wu Yap (Harvard)

Louie Angelo Lee, MA 2016
Corinna Wendisch, MA 2016

EDITORIAL POSITIONS

Editorial Board, Journal of the American Mathematical Society, 2018–present
Editorial Board, Journal of Modern Dynamics, 2014–present
Designated Editor, International Mathematics Research Notices, 2020–present
Editorial Board, AMS Journal of Conformal Geometry and Dynamics, 2013–2020

RECENT CONFERENCE ORGANIZATION (since 2016 only)

Organizer, Simons Symposium Series in Arithmetic and Algebraic Dynamics, 2019–2023
Organizer, Midwest Dynamical Systems Conference, Northwestern, November 2021
Organizer, Circle at Infinity, Conference in honor of McMullen's mathematics, June 2022
Organizer, Workshop, Mathematisches Forschungsinstitut Oberwolfach, April 2022
Scientific Committee, CIMPA School in Complex Analysis, Uzbekistan (postponed)
Scientific Committee, Iberoamerican Congress in Geometry, Mexico (postponed)
Organizer, Workshop, American Institute of Mathematics, September 2021
Organizer, Dynamics Days at Northwestern, 2019–2020
Organizer, Complex and Arithmetic Dynamics workshop, May 2018
Organizer, Chicago Action Now Dynamics Day, May 2018
Scientific Committee, Iberoamerican Congress in Geometry, Spain, January 2018
Organizer, Midwest Dynamical Systems Conference, Northwestern, November 2017
Organizer, BIRS Oaxaca Workshop, November 2017
Organizer, GROW 2017, conference for undergraduate women in mathematics, October 2017
Organizer, GROW II, conference for undergraduate women in mathematics, October 2016
Organizer, Summit Meeting on Gender Imbalance, Northwestern, October 2016